CLAIMS

What is claimed is:

1.   A method of facilitating transmission of a message from a sender to a receiver, comprising:

        storing sender identification information in association with a penalty that a sender is
            willing to incur for a first message that is unwanted by the receiver;

        receiving a query about whether a sender of a first message satisfies specified sending
            criteria;

        determining whether the sender satisfies the specified sending criteria; and

        sending a second message specifying whether the sender of the first message satisfies
            the specified sending criteria, for use by the receiver in determining whether
            to accept the first message.

2.   A method as recited in Claim 1, wherein the determining step comprises determining whether the penalty is greater than a base penalty amount multiplied by the sum of (a) a number of complaints about unsolicited messages that are actually received from the sender and (b) an estimate of a number of complaints that are not yet made or never made by the receiver and any other receiver.

3.   A method as recited in Claim 2, further comprising refusing to accept the first message when the penalty is not greater than the base penalty amount multiplied by the sum of (a) and (b).

4.   A method as recited in Claim 1, wherein the determining step comprises determining a sender experience value for the sender of the first message, wherein the sender experience value is computed as the penalty divided by a sum of a number of complaints about unwanted messages that are actually received from the sender and an estimate of a number of complaints that are not yet filed or never filed by the receiver and any other receivers.

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1   5.   A method as recited in Claim 4, further comprising refusing to accept the first

2   message when the sender experience value for the sender of the first message is less than a

3   specified minimum sender experience value.

1   6.   A method of authorizing transmission of a first message from a sender to a receiver,

2   comprising:

3   storing sender identification information in association with a penalty value

4   identifying an amount of monetary value that a sender is willing to pay for a

5   specified message that is sent by the sender to the receiver and that is

6   unwanted by the receiver;

7   receiving a query about whether a first message from the sender is subject to a

8   penalty offered by the sender;

9   determining whether the first message is subject to a penalty offered by the sender;

10   and

11   sending a second message specifying whether the first message is subject to a penalty

12   offered by the sender.

1   7.   A method as recited in Claim 6, further comprising the step of receiving a third

2   message indicating that the first message is unwanted.

1   8.   A message as recited in Claim 7, further comprising verifying that the third message

2   is legitimate based on comparing a source network address of the third message to a recipient

3   address in the first message.

1   9.   A method as recited in Claim 6, further comprising the steps of:

2   receiving a third message, from the receiver, indicating that the first message is

3   unwanted;

4   in response to receiving the third message, transferring money from the sender's

5   account.

1   10.   A method as recited in Claim 6, further comprising the steps of receiving a third

2   message, from the receiver, indicating that the first message is unwanted; and in response to

3   receiving the third message, determining a sender experience value for the sender of the first

4   message, wherein the sender experience value is computed as the amount of monetary value

5   divided by a sum of a number of complaints about unwanted messages that are actually

6   received from the sender and an estimate of a number of complaints that are not yet filed or

7   never filed by the receiver and any other receivers.

1   11.   A method as recited in Claim 6, further comprising the steps of:

2   receiving a third message, from the receiver, indicating that the first message is

3   unwanted;

4   in response to receiving the third message, transferring value from the sender,

5   wherein the value transferred from the sender is equal to the penalty value.

1   12.   A method as recited in Claim 6, further comprising the steps of:

2   after sending the second message, receiving a request to reserve an amount of

3   monetary value equal to the penalty value;

4   in response to receiving the reservation request, storing a reserved penalty value in

5   association with the sender identification data;

6   receiving a third message, from the receiver, indicating that the first message is

7   unwanted;

8   in response to receiving the third message, transferring value from the sender .

1   13.   A method as recited in Claim 6, further comprising the steps of:

2   sending the penalty value as part of the second message;

3   receiving a third message, from the receiver, indicating that the first message is

4   unwanted;

5   in response to receiving the third message, transferring value from the sender.

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1   14.   A method as recited in Claim 6, wherein the first message is an electronic mail
2   message.

1   15.   A method as recited in Claim 6, wherein the first message is a telephone message.

1   16.   A method as recited in Claim 6, wherein the first message is an electronic mail
2   message, and wherein the query is received from an electronic mail service provider.

1   17.   A method as recited in Claim 6, wherein the first message is a telephone message,
2   and wherein the query is received from a telephone network service provider.

1   18.   A method as recited in Claim 6, wherein the storing step comprises the step of storing
2   sender identification information with multiple penalty values identifying a plurality of
3   different amounts of monetary value that a sender is willing to pay for a message that is sent
4   by the sender to receivers and that is unwanted by the receivers, wherein each of the plurality
5   of penalty values is associated with one of a plurality of receivers.

1   19.   A method as recited in Claim 6, wherein the storing step comprises the step of storing
2   sender identification information in association with a plurality of penalty values identifying
3   a plurality of different amounts of monetary value that a sender is willing to pay for a
4   message that is sent by the sender to receivers and that is unwanted by the receivers, wherein
5   each of the plurality of penalty values is associated with one of a plurality of categories of
6   receivers.

1   20.   A method as recited in Claim 6, wherein the storing step comprises the step of storing

2   sender identification information in association with a plurality of penalty values identifying

3   a plurality of different amounts of monetary value that a sender is willing to pay for a

4   message that is sent by the sender to a receiver and that is unwanted by the receiver, wherein

5   each of the plurality of penalty values is associated with one of a plurality of categories of

6   messages.

1   21.   A method as recited in Claim 6, wherein the storing step comprises the step of storing

2   sender identification information in association with a penalty value identifying a maximum

3   amount of monetary value that a sender is willing to pay for a message that is sent by the

4   sender to a receiver and that is unwanted by the receiver, and further comprising the steps of:

5   receiving a third message, from the receiver, indicating that the first message is

6   unwanted;

7   in response to receiving the third message, selecting a value amount that is less than

8   or equal to the penalty value, and transferring the selected value amount from

9   the sender.

1   22.   A method as recited in Claim 6, further comprising the steps of:

2   receiving a third message, from the receiver, indicating that the first message is

3   unwanted;

4   in response to receiving the third message, transferring value from the sender,

5   including transferring a portion of the value to the recipient.

1   23.   A method for sending a bonded message to a recipient, comprising:

2   agreeing, with a service operator, to pay a penalty if a recipient receives an unwanted

3   bonded message;

4   sending a bonded message to the recipient; and

5   paying a penalty if the recipient in response to the recipient indicating that the bonded

6   message is unwanted.

1   24.   A method for processing an electronic message, comprising:

2   receiving a first message from a sender that is sent to an intended recipient;

3   requesting a service operator to determine whether the first message is bonded;

4   receiving a second message from the service operator indicating whether the first

5   message is bonded; and

6   forwarding the first message to the intended recipient only when the second message

7   indicates that the first message is bonded.

1   25.   A method for processing an electronic message, comprising:

2   receiving a first message from a sender that is sent to an intended recipient;

3   requesting a service operator to determine whether the sender of the first message

4   satisfies specified sending criteria;

5   receiving a second message from the service operator indicating whether the sender

6   satisfies the specified sending criteria;

7   forwarding the first message to the intended recipient only when the second message

8   indicates that the sender of the first message satisfies the specified sending

9   criteria.

1   26.   A method as recited in Claim 25, wherein the second message indicates whether, for

2 the sender, an amount of monetary value that the sender has agreed to forfeit is greater than a

3 penalty that is computed as a base penalty amount multiplied by the sum of (a) a number of

4 complaints about unwanted messages that are actually received from the sender and (b) an

5 estimate of a number of complaints that are not yet made or never made by the receiver and

6 any other receiver.

1   27.   A method as recited in Claim 26, further comprising forwarding the first message

2 only when the amount of monetary value is greater than the penalty.

1   28.   A method as recited in Claim 25, wherein the second message includes a sender

2   experience value for the sender of the first message, wherein the sender experience value is

3   computed as the amount of monetary value divided by a sum of a number of complaints

4   about unwanted messages that are actually received from the sender and an estimate of a

5   number of complaints that are not yet filed or never filed by the receiver and any other

6   receivers.

1   29.   A method as recited in Claim 28, further comprising forwarding the first message

2   only when the sender experience value for the sender of the first message is greater than or

3   equal to a specified minimum sender experience value.

1   30.   A method as recited in Claim 25, wherein the second message includes a penalty

2   value identifying a monetary penalty that the sender is willing to pay if the recipient indicates

3   that the first message is unwanted.

1   31.   A method as recited in Claim 25, wherein the second message includes a penalty

2   value identifying a monetary penalty that the sender is willing to pay if the recipient indicates

3   that the first message is unwanted, and wherein the requesting step includes requesting the

4   service operator to determine whether the first message is bonded by comparing the penalty

5   value to a specified threshold.

1   32.   A method as recited in Claim 25, wherein the second message includes a penalty

2   value identifying a monetary penalty that the sender is willing to pay if the recipient indicates

3   that the first message is unwanted, and wherein the requesting step includes requesting the

4   service operator to determine whether the first message is bonded by comparing the penalty

5   value to a specified threshold, and wherein the specified threshold is selected based on an

6   identity of the intended recipient.

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1   33.   A method managing electronic messages sent from a sender to a recipient,

2   comprising:

3   receiving agreement from a message sender to pay a penalty , wherein the penalty is

4   based upon a determination that one or more electronic messages sent by the

5   message sender to message recipients are unwanted by the message recipients;

6   receiving one or more indications that a message sent by the message sender is

7   unwanted by one or more of the message recipients;

8   creating and storing one or more records of the indications; and

9   charging the message sender a penalty based upon the number of indications that are

10   received.

1   34.   A method as recited in Claim 33, further comprising the steps of informing the

2   recipient whether, for the sender, an amount of monetary value that the sender has agreed to

3   forfeit is greater than a base penalty amount multiplied by the sum of (a) a number of

4   complaints about unwanted messages that are actually received from the sender and (b) an

5   estimate of a number of complaints that are not yet made or never made by the receiver and

6   any other receiver.

1   35.   A method as recited in Claim 33, further comprising informing the recipient of a a

2   sender experience value for the sender of the first message, wherein the sender experience

3   value is computed as the amount of monetary value divided by a sum of a number of

4   complaints about unwanted messages that are actually received from the sender and an

5   estimate of a number of complaints that are not yet filed or never filed by the receiver and

6   any other receivers.

1   36.   A method as recited in Claim 33, wherein the electronic messages are e-mail

2   messages.

1   37.   A method as recited in Claim 33, wherein the electronic messages are telephone calls.

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1 38.   A method as recited in Claim 33, wherein the electronic messages are pager
2 messages.

1 39.   A method as recited in Claim 33, wherein the penalty is determined by multiplying
2 the number of indications by a specified fine amount.

1 40.   A method as recited in Claim 33, wherein the penalty is limited to a specified
2 maximum penalty amount for all indications that are received in a specified period.

1 41.   A method as recited in Claim 33, wherein the penalty is determined by multiplying
2 the number of indications received by a penalty value that is selected from among one of a
3 plurality of penalty values based on the number of indications that are received.

1 42.   A method as recited in Claim 33, wherein the penalty is a fixed amount per indication
2 that exceeds an allowed complaint rate.

1 43.   A method of penalizing a sender of unsolicited messages directed to a recipient,
2 comprising the steps of:
3   receiving information specifying that the sender has deposited monetary value in an
4   account associated with information identifying the sender;
5   receiving, from the recipient, information identifying an allegedly wanted message
6   dispatched from the sender to the recipient;
7   determining that the allegedly unsolicited electronic message was unwanted; and
8   penalizing the sender by conveying some or all of the monetary value from the
9   account to a service operator, a receiver, or the recipient in response to
10   determining that the allegedly unsolicited electronic message was unsolicited.

1 44.   A method of operating an electronic message gateway, comprising the steps of:
2   receiving an electronic message from a sender;

3   determining whether the sender is identified in a list of known senders;

4   determining whether the message is a mass unsolicited electronic message; and

5   issuing one or more instructions to convey some or all of monetary value, held in an

6   account associated with the sender, from an account associated with the

7   sender to a service operator, a receiver, or the recipient of the electronic

8   message, in response to determining that the electronic message is a mass

9   unsolicited electronic message.

1   45.   A method of operating an electronic messaging system, comprising the steps of:

2   receiving information specifying that the sender has deposited monetary value in an

3   account associated with information identifying the sender;

4   receiving an electronic message from a sender;

5   determining whether the sender is identified in a list of known senders;

6   determining whether the message is an unwanted message; and

7   conveying some or all of the monetary value, from the account associated with the

8   sender, to service operator, a receiver, or the recipient of the electronic in

9   response to determining that the electronic message is an unwanted electronic

10   message.

1   46.   A method as recited in Claim 45, further comprising the steps of:

2   receiving, from the recipient, directly or indirectly, information identifying an

3   allegedly unsolicited message dispatched from the sender to the recipient; and

4   conveying some or all of the monetary value from the account to service operator, a

5   receiver, or the recipient in response to determining that the allegedly

6   unsolicited electronic message was unwanted , based on the information

7   received from the recipient.

1   47.   A method of penalizing a sender of unsolicited messages directed through a receiver

2   to a recipient, comprising the steps of:

3   receiving an encrypted token that the sender provided in the message;

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4   determining, based on values in the encrypted token, whether the sender actually

5   created the token;

6   determining whether the sender has sufficient credit to suffer a penalty if the message

7   is unwanted by the recipient;

8   sending a response message identifying whether the sender actually created the token

9   and whether the sender has sufficient credit;

10   receiving information specifying that the message is unwanted; and

11   penalizing the sender.

1 48. A method as recited in Claim 47, further comprising determining whether a recipient

2 address value in the encrypted token matches a known network address of the recipient.

1 49. A method as recited in Claim 47, wherein the encrypted token includes a sender

2 identifier, token identifier, and penalty amount offered by the sender.

1 50. A method as recited in Claim 47, wherein the encrypted token includes a sender

2 identifier, token identifier, penalty amount offered by the sender, and expiration time value.

1 51. A method as recited in Claim 47, wherein values in the encrypted token comprise a

2 sender identifier, penalty amount offered by the sender, and recipient address.

1 52. A method as recited in Claim 47, further comprising the steps of determining whether

2 the encrypted token has been processed before, and generating a value in the response

3 message that indicates whether the encrypted token has been processed before.

1 53. A method as recited in Claim 47, wherein values in the encrypted token comprise an

2 expiration time value, and further comprising the steps of:

3   determining whether the expiration time value has passed;

4   accepting the message only when the expiration time value has not passed.

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1   54.   A method as recited in Claim 47, wherein values in the encrypted token comprise an

2   penalty amount offered by the sender, and further comprising the steps of:

3   determining whether the penalty amount offered by the sender is greater than a

4   specified minimum penalty value;

5   accepting the message only when the penalty amount offered by the sender is greater

6   than a specified minimum penalty value.

1   55.   A method as recited in Claim 47, wherein values in the encrypted token comprise a

2   recipient address value, and further comprising the steps of:

3   determining whether the recipient address value matches a destination address value

4   in a header of the message;

5   accepting the message only when the recipient address value matches a destination

6   address value in a header of the message.

1   56.   A method as recited in Claim 47, further comprising the steps of accepting the

2   message only when the sender actually created the token.

1   57.   A method as recited in Claim 47, further comprising the steps of penalizing the

2   sender only when a complaint message containing the token is determined to have actually

3   originated from a recipient of the first message.

1   58.   A method as recited in Claim 47, further comprising the steps of accepting the

2   message only when the sender has sufficient credit to suffer a penalty if the message is

3   unwanted by the recipient.

1   59.   A method as recited in Claim 47, further comprising the steps of:

2   receiving the encrypted token with the information specifying that the message is

3   unwanted; and

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4   penalizing the sender only upon determining, based on a sender identifier in the

5   token, that the sender actually created the token.

1   60.   A method as recited in Claim 47, further comprising the steps of:

2   receiving the encrypted token with the information specifying that the message is

3   unwanted; and

4   penalizing the sender only upon determining, based on an expiration time value in the

5   token, that the token is unexpired.

1   61.   A method as recited in Claim 47, further comprising the steps of:

2   receiving the encrypted token with the information specifying that the message is

3   unwanted; and

4   penalizing the sender only upon determining, based on the token, that the sender has

5   not previously paid a penalty for other messages associated with the same

6   token.

1   62.   A method as recited in Claim 47, further comprising the steps of penalizing the

2 sender only upon determining, based on a recipient address in the token, that the submitter of

3 the information specifying that the message is unwanted actually owns or is associated with

4 the recipient address.

1   63.   A method as recited in Claim 47, wherein penalizing the sender comprises a service

2 operator issuing an invoice to the sender for payment of a fine.

1   64.   A method as recited in Claim 47, wherein penalizing the sender comprises a service

2 operator transferring funds previously provided by the sender from a first account associated

3 with the service operator to a second account associated with the receiver, the recipient, or a

4 beneficiary.

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1   65.   A computer-readable medium carrying one or more sequences of instructions for

2   delivering electronic messages, which instructions, when executed by one or more

3   processors, cause the one or more processors to carry out the steps of any of Claims 1, 6, 24,

4   25, 33, 42, 43, 44, 45, or 47.

1   66.   An apparatus for creating and storing troubleshooting information for delivering

2   electronic messages, comprising means for performing any of the functions recited in Claims

3   1, 6, 24, 25, 33, 42, 43, 44, 45, or 47.

1   67.   An apparatus for delivering electronic messages, comprising:

2   a network interface that is coupled to the data network for receiving one or more packet

3   flows therefrom;

4   a processor;

5   one or more stored sequences of instructions which, when executed by the processor, cause

6   the processor to carry out the steps of any of Claims 1, 6, 24, 25, 33, 42, 43, 44, 45 or

7   47.

1   68.   A method as recited in Claim 1, wherein the penalty comprises money, resources,

2   goods, services, or promises.

1   69.   A method as recited in Claim 6, further comprising the steps of:

2   receiving a third message, from the receiver, indicating that the first message is

3   unwanted;

4   determining whether the third message exceeds an allowed complaint rate associated

5   with the sender; and

6   debiting value from the sender when the complaint rate is exceeded.

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